## ACADEMIC DATA SECURITY SYSTEM WITH WEB-BASED ALGORITHM (AES-128)

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## *ABSTRACT*

The importance of data and the vulnerability of data leaks makes several parties wary of this risk. Confidentiality and authenticity of data are important nowadays. Cryptography is one of the right solutions to maintain the confidentiality and authenticity of data. Encryption is a way of scrambling data so that the information can only be read by people who have access. Data that has been encrypted can only be read by the recipient using certain keys. This academic data security system applies an advanced encryption standard algorithm to secure the academic data in the system. The academic data that will be secured contains student data, teacher data, payment data, attendance data and assessment data. The advanced encryption standard algorithm was chosen because it has a fairly good level of information exchange security. This research focuses on implementing the advanced encryption standard algorithm to secure academic data so that the data is not misused by people who do not have the rights to the academic data.

Keywords: Cryptography, Algorithms, Encryption, AES-128